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10/698,700

10/31/2003

Suresh Katukam

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EXAMINER

FAROUL, FARAH

ART UNIT

PAPER NUMBER

2616

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/698,700 | <b>Applicant(s)</b><br>KATUKAM, SURESH |  |
|                              | <b>Examiner</b><br>FARAH FAROUL      | <b>Art Unit</b><br>2616                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-16 and 18-30 is/are rejected.
- 7) ☒ Claim(s) 10, 17 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 31, 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 1, 2008, has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The abstract of the disclosure is objected to because of the following informalities:

The phrase "such that" recited in lines 8-9 and 11 should be deleted from the abstract. Correction is required. See MPEP § 608.01(b).

***Claim Objections***

5. Claims 5, 11, 13 and 28 are objected to because of the following informalities:

The duplicated word "the" recited in line 3 of claim 5 preceding the word "second" is to be deleted.

The phrase "such that" recited in line 7 of claim 11 should be deleted to render the claim positive.

The phrase "such that" recited in line 2 of claim 13 should be deleted to render the claim positive.

The phrase "may be" recited in lines 6-7, 10, and 14-15 of claim 28 should be deleted to render the claim positive.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2616

Claims 5-6, 10, and 19-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the alternate circuit path to be **substantially** specified" in line 3. The limitation renders the claim vague and indefinite. One skilled in the art cannot objectively assess how a path is "substantially" specified. Furthermore, applicant is required to explain or define within the claims how the path is "specified" or delete the limitation from the claim. It is also suggested that the word "substantially" be deleted from the claim limitations.

Claim 6 is rejected for being dependent upon rejected claim 5.

Claim 10 recites the limitation "one protected link is **substantially** lower than the costs" in line 7. The limitation renders the claim vague and indefinite. One skilled in the art cannot objectively assess how much a link is "substantially" lower. It is suggested that the word "substantially" be deleted from the claim limitations.

Claim 19 recites the limitation "the alternate path segment to **substantially** start" in line 7. The limitation renders the claim vague and indefinite. One skilled in the art cannot objectively assess how much to "substantially" start. Furthermore, applicant is required to explain or define within the claims how the segment "starts" or delete the limitation from the claim. It is also suggested that the word "substantially" be deleted from the claim limitations.

Claims 20-23 are subsequently rejected for being dependent upon rejected claim 19.

Claim 24 recites the limitation “the alternate path segment to **substantially** start” in line 9. The limitation renders the claim vague and indefinite. One skilled in the art cannot objectively assess how much to “substantially” start. Furthermore, applicant is required to explain or define within the claims how the segment “starts” or delete the limitation from the claim. It is also suggested that the word "substantially" be deleted from the claim limitations.

Claims 25-27 are subsequently rejected for being dependent upon rejected claim 24.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Admitted Prior Art in figures 1-2 of the instant application (see pages 1-4), hereinafter referred to as APA.

For claims 1, 11-12, 19, and 24, the APA discloses a primary circuit path (Fig 2, path 204) from the first node (Fig 2, element 102a) to the second node (Fig 2, 102d), the primary circuit path includes a first protected link (Fig 2, link 106a) selected from the plurality of elements (nodes A-H) the primary circuit path is arranged to include at least

Art Unit: 2616

one protected link in a protectable segment of the primary circuit path (page 3, lines 16-22)

An alternate circuit path (Fig 2, path 208) from the first node to the second node wherein the alternate circuit path protects at least the protectable segment of the primary circuit path (page 3, lines 16-22)

For claim 28, the APA discloses a first set of computer-executable instructions to enable a determination to be made regarding whether at least one protected link selected from the plurality of elements includes a protectable segment of a primary path (page 3, lines 16-22)

A second set of computer-executable instructions arranged to create a primary circuit path from the first node to the second node (see primary path 204 from node 102a to node 102d in Fig 2) which includes at least one protected link when it is determined that at least one protected link is included in the protectable segment of the primary path, wherein the second set of computer-executable instructions is arranged to include at least one protected link in the protectable segment of the primary circuit path (page 3, lines 11-18)

A third set of computer-executable instructions arranged to create an alternate circuit path from the first node to second node when it is determined that at least one protected link (see alternative path 208 of Fig 2) is included in the protectable segment of the primary path, wherein the alternate circuit path is arranged to protect at least the protectable segment of the primary circuit path (page 3, lines 16-18)

For claims 2, 4, 20, 25 and 29, the APA discloses that the protected link is a 1+1 protection link (links 106a and 106b of Fig 2 and page 3, lines 15-17).

For claims 3, 13, 22, 27, and 30, the APA discloses creating the alternate path includes using the routing algorithm (page 4, lines 1-4 wherein the path is created based on cost or number of hops).

For claim 5, the APA discloses enabling at least one element of the plurality of elements which is required in the alternate circuit path to be substantially specified and creating the alternate path using at least one element of the plurality of elements which is required (see Fig 2 wherein the source node (102a) or destination node (102d) is required in the primary or alternate path).

For claim 6, the APA discloses at least one element of the plurality of elements required in the alternate circuit path is a third node which is associated with the beginning of the at least one protected link and a fourth node which is associated with the end of the at least one protected link (see alternate path 208 of Fig 2 wherein the third and fourth node (nodes A and C) represent the start and end of the protected link).

For claims 7-8, the APA discloses the device is associated with a first node and implementing the primary circuit and the alternate circuit path (see Fig 2, element 102a).

For claims 9, 16 and 23, the APA discloses the primary path is a lowest cost circuit path between the first node and the second node and the alternate circuit path is a lowest circuit path between the first node and the second node which protects the primary circuit path (see Figure 15 and paragraphs 11 and 13)



For claim 14, the APA discloses a first node associated with the start and a second node associated with the end are included in the alternate path (see alternate path 208 of Fig 2 connecting star node 102a and end node 102d).

For claim 15, the APA discloses the primary path being the shortest path between the start node and the destination node (see Fig 2 wherein the primary path 204 is the shortest path between nodes 102a and 102d)

For claims 18, 21, 26 and 29, the APA discloses the overall circuit path is a unidirectional path-switched ring (page 1, lines 25-29).

### ***Allowable Subject Matter***

8. Claims 10, 17 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARAH FAROUL whose telephone number is (571)270-1421. The examiner can normally be reached on Monday - Friday 8:00 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Farah Faroul/  
Examiner, Art Unit 2616

/FIRMIN BACKER/  
Supervisory Patent Examiner, Art Unit 2616